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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/763,748	01/23/2004	Christopher J. Zwettler	10333US01	7626

7590 06/30/2006

Attention: Eric D. Levinson
Imation Corp.
Legal Affairs
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St. Paul, MN 55164-0898

EXAMINER

HAUGLAND, SCOTT J

ART UNIT PAPER NUMBER

3654

DATE MAILED: 06/30/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/763,748

Applicant(s)

ZWETTLER, CHRISTOPHER J.

Examiner

Scott Haugland

Art Unit

3654

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 April 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 2 and 5-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 2, and 5-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 12 and 18-22 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The originally filed application does not disclose that the drive member is stationary in the second direction prior to interaction with the driven member as recited in claim 12, lines 9-10.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, and 13-16 are rejected under 35 U.S.C. 102(b) as being anticipated by Zwettler (U.S. Pat. No. 6,457,664).

Zwettler discloses a data storage cartridge 20 having a tape driven by a drive belt 64 comprising a housing 22 having a driven roller (upper portion of 58 in Fig. 6) rotatably mounted in the housing and a driven member (lower portion of 58 in Fig. 6) operatively connected to the driven roller having a drive member engagement surface and a drive member capturing member. The cartridge of Zwettler is capable of use with the claimed drive and has a drive member engagement surface.

With regard to claim 2, the cartridge of Zwettler has a driven member comprising a cylindrical member (lower portion of roller 58 in Fig. 6) connected to the roller (upper portion of roller 58) having angled surfaces (on teeth 100) proximate a second end of the cylindrical member and a slot (formed by a pair of teeth 100) defined in the second end.

With regard to claim 14, note cavities in the lower portion of 58 adjacent the edges of opening 110 in Fig. 6 of Zwettler.

Claims 12 and 18-22 are rejected under 35 U.S.C. 102(b) as being anticipated by Kimizuka et al (U.S. Pat. No. 4,445,651).

Kimizuka et al discloses a method of engaging a data storage cartridge into a drive having a drive member 42a, 42b, 43a, 43b, 44a, 44b moveable between a first position and a second position, the method comprising: inserting the cartridge into the drive in a first direction, moving the drive member 42a, 42b, 43a, 43b, 44a, 44b from its

Art Unit: 3654

first position to its second position by movement of the cartridge in the first direction, movement from the first position to the second position being generally perpendicular to the first direction, moving the drive member back towards its first position when the cartridge is fully inserted, and engaging the drive member to a driven member 31a, 31b on the cartridge. Note col. 5, lines 14-30. The drive member is stationary in the second direction at some time prior to interaction with the driven member. With regard to claim 18, Kimizuka et al has a front perpendicular to the top (that defines openings 33a, 33b) and that intersects the openings so that the openings extend to the front.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 5, 6, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zwettler (U.S. Pat. No. 6,457,664) in view of Kimizuka et al (U.S. Pat. No. 4,445,651).

Zwettler is described above.

Zwettler does not disclose explicitly disclose that the drive member is moveable in a first direction by contact with the cartridge or that insertion of the cartridge in the

- drive in a second direction generally perpendicular to the first direction moves the drive member in the first direction.

Kimizuka et al teaches making a drive member of a cartridge drive moveable in a first direction by contact with a cartridge during insertion of the cartridge in a second direction perpendicular to the first direction.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the cartridge of Zwettler with a driven member moveable in a first direction by contact with the cartridge when the cartridge is inserted into the drive in a second direction generally perpendicular to the first direction as taught by Kimizuka et al to provide a simple mechanism for effecting positive engagement and alignment of the cartridge drive and driven roller.

With regard to claim 6, It would have been obvious to provide a spring as taught by 46a, 46b of Kimizuka et al to bring about engagement of the drive member and roller. The spring is operatively connected to the motor at least through connection with other components of the apparatus. The motor disclosed by Zwettler and Zwettler as modified is above the driven roller opening when the apparatus is some orientation of the apparatus.

Claims 7-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zwettler in view of Kimizuka et al as applied to claim 6 above, and further in view of Zuckschwert et al (U.S. Pat. No. 3,934,841).

Zwettler does not disclose that the drive motor is moveable.

Zuckschwert et al teaches making a drive motor 4, 5 for a tape cartridge 9 moveable along with a drive member 6, 7 to permit engagement and disengagement of the drive member and the cartridge during loading and unloading.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the motor of Zwettler moveable along with the drive member as taught by Zuckschwert et al to accomplish the required moveability of the drive member.

With regard to claim 8, Zwettler has a driven member comprising a cylindrical member (lower portion of 58 in Fig. 6) connected to the roller (upper portion of 58) having angled surfaces (on teeth 100) proximate a second end of the cylindrical member and a slot (formed by a pair of teeth 100) defined in the second end. Kimizuka et al also teaches these structures.

With regard to claim 11, the driven roller opening is over the driven member in some orientation of the cartridge.

Response to Arguments

Applicant's arguments filed 4/10/06 have been fully considered but they are not persuasive.

Applicant argues that Zwettler does not disclose a housing having a top, a front adjacent the top, and a driven roller opening defined by the top that extends to the front. However, the opening 110 in the top of the housing in Zwettler extends to the front (top

portion of the housing in Figs. 3 and 4A). As can be seen from Fig. 3 of Applicant's drawings, there is no opening that extends to the outer surface of 26, 29.

Applicant argues that the driven members disclosed by Kimizuka et al are not maintained within the housing. However, the language of claim 12 does not exclude a portion of drive members extending out of the housing. The drive members are in the housing and cannot be removed from the housing without disassembly. In addition, the drive members are maintained in the housing while the cartridge is mounted in a drive (Fig. 5).

Applicant argues that drive shafts 42a, 42b (drive member) of Kimizuka et al are not stationary in the second direction prior to interaction with the driven member as recited in claim 12. However, the drive shafts do not move in the direction parallel to their axes (second direction) at some time prior to interaction with the driven member in the cartridge. Normally, only cartridge loading/unloading moves the drive shafts in a direction parallel to their axes.

Applicant argues that insertion of a cartridge into the drive of Zwettler does not interface an inclined surface with the drive chuck (drive member) to move the chuck in a first direction as recited in claim 5 and that Kimizuka et al does not teach this. However, the hubs in Kimizuka et al have inclined surfaces (teeth 31a, 31b, sides of concave portions 30a', 30b') with which the drive member 42a, 42b interfaces to move the drive member.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

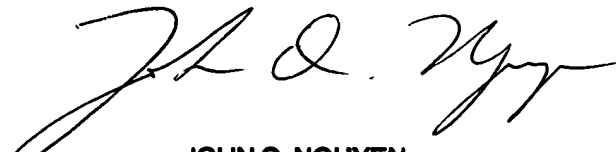
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott Haugland whose telephone number is (571) 272-6945. The examiner can normally be reached on Monday - Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kathy Matecki can be reached on (571) 272-6951. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3654

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


sjh
6/15/06


JOHN Q. NGUYEN
PRIMARY EXAMINER